FW: Stream Restoration parameters

Bucholtz, Paul (DEQ) to. Lisa_Williams, Goeks.Todd, SAMUEL BORRIES 01/04/2010 07.58 AM

FYI, some thoughts from our stream team folks about how to monitor a stream channel for stability We will need to consider this type of information as part of a lessons learned exercise or as it relates to stable river channel for future activity

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From: Reznick, Ralph (DEQ)
Sent: Wednesday, December 23, 2009 10:27 AM
To: Bucholtz, Paul (DEQ)
Cc: Rathbun, Joseph (DEQ); Freiburger, Chris
Subject: Stream Restoration parameters

Paul, here is the verbiage I think I was thinking of when we met Where it says to compare to "design information" that will be reference reach data in your case Sorry it took me so long to get this to you and now after I send this note I'll be cutting out for the holidays. When I come back in January I can help refine these words for your site

Hope you have a great holiday!

----- Ralph

Monitoring methods used to determine the effectiveness of recovery.

1. At least two cross sections will be established for each sub-reach and monitored following each bankfull flow event. The cross section measurements will be taken at riffles or immediately upstream of cross vanes. Cross section surveys will provide detailed measurements which can be used to compare to the design information for cross section area, width to depth ratio, bankfull elevation and flood prone area. A list of photographs taken to document the cross sections will also be included.

2. Provide a longitudinal profile for each sub-reach measured following each bankfull flow event.

3. Compare changes in the cross section, pattern, and slope to the design morphological characteristics determined in "Technical Memorandum: Computation Brief for Dead River Pre-Reach A and Reach B Recovery", August 2005; and comparable final design documents used for the Reach A design. Please identify the document name, document number, and date in the Plan. Identify any variables where the measured value falls outside the ranges specified for the final design. Compare the Rosgen stream type determined from measurements to the stream type used for design purposes. The reach will be considered unstable if any channel variables exceed the design range for that variable or the stream type has changed.

4. Identify any in stream structural failures as indicated by erosion around the structure, undermining of the structure, loss of structure materials or a significant change in the shape or configuration of the structure. The reach will be considered unstable if there are any structural failures.

5. Include photos from each monitoring event looking upstream and downstream at all of the structures. In addition to the report, all labeled original electronic .jpg photos will be submitted by CD for each monitoring event.

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